



Florida Agricultural Statistics Service  
1222 Woodward Street  
Orlando, Florida 32803  
407 / 648-6013

<http://www.nass.usda.gov/fl>

# CITRUS

## DECEMBER FORECAST

### MATURITY TEST RESULTS AND FRUIT SIZE



December 10, 2002

#### ALL ORANGES 197.0 MILLION BOXES

The all orange forecast released today by the USDA Agricultural Statistics Board is unchanged at 197.0 million boxes. Comprising this forecast are 113.0 million boxes of early-midseason-Navel oranges and 84.0 million Valencias. In the past 10 seasons, the December forecast has differed from actual production by an average of 2.7 percent with five seasons above and five below.

Estimated utilization, including an allowance for gift fruit, is 22.6 million boxes through December 1. This figure includes early and midseason varieties only as harvest of the late season Valencias has not begun. Throughout the citrus belt, temperatures were generally below average for the month while rainfall was normal in most areas.

#### EARLY-MIDSEASONS UNCHANGED AT 113.0 MILLION BOXES

The forecast of early-midseason-Navel oranges remains at 113.0 million boxes. The growth rate which slacked off in October returned to a more normal pattern in November and the projection is increased slightly. Objective survey data shows the droppage continues above average and supports an increased projection, nearing the maximum of the past 10 seasons.

The Navel portion of this crop continues at 5.5 million boxes. Estimated utilization through December 1 is 1.7 million boxes. Measured volume at harvest is slightly above the initial projection, requiring one less piece of fruit to fill a 90

Citrus production, December 1, 2002  
forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	2000-01	2001-02	Nov 12, 2002	Dec 10, 2002
Early, Midseason,	--- 1,000 boxes ---			
<b>FLORIDA</b>	<b>128,000</b>	<b>128,000</b>	<b>113,000</b>	<b>113,000</b>
California	35,500	34,000	40,000	40,000
Texas	2,000	1,530	1,400	1,400
Arizona	480	270	200	200
Total Above Varieties	165,980	163,800	154,600	154,600
Valencias:				
<b>FLORIDA</b>	<b>95,300</b>	<b>102,000</b>	<b>84,000</b>	<b>84,000</b>
California	19,000	22,000	23,000	23,000
Texas	235	210	180	180
Arizona	420	250	250	250
Total Valencias	114,955	124,460	107,430	107,430
All Oranges:				
<b>FLORIDA</b>	<b>223,300</b>	<b>230,000</b>	<b>197,000</b>	<b>197,000</b>
California	54,500	56,000	63,000	63,000
Texas	2,235	1,740	1,580	1,580
Arizona	900	520	450	450
Total All Oranges	280,935	288,260	262,030	262,030

#### FORECAST DATES 2002-03 SEASON

January 10, 2003	February 11, 2003
March 11, 2003	April 10, 2003
May 12, 2003	June 11, 2003
July 11, 2003	

pound equivalent box. Navel droppage, below the 10 season average since the beginning of the season, finished even lower than projected.

#### 84.0 MILLION BOXES OF VALENCIAS

The forecast for Valencia oranges is unchanged at 84.0 million boxes. Fruit size remains above the 10 season maximum and the projection is slightly higher than in October. However, the growth rate is slowing down and is expected to slow further until harvest. Measured drop has been above the 10 season average and the droppage rate increased during November resulting in an increased projection for this forecast component.

#### Components used in the December Forecast

Type	Bearing trees	Fruit per tree	Percent droppage	Fruit per box
(1,000)				
Early-Mid	34,042	950	13	235
Navel	2,313	454	12	133
Valencia	41,682	524	19	198

#### FCOJ YIELD 1.57 GALLONS PER BOX

The all orange FCOJ yield projection is unchanged from October at 1.57 gallons per box of 42.0 degrees Brix concentrate. The final all orange yield for the 2001-02 and 2000-01 seasons, as reported by the Florida Citrus Processors Association, was 1.58 gallons per box. The record high yield for all oranges occurred in the 1998-99 season. A separate projection for fruit going into the early and midseason category and the late (Valencia) oranges will be made in the January report.

All projections of yield assume the processing relationships of the past several seasons will be similar this season. Results of the latest maturity testing with comparisons are found on page 3.

## GRAPEFRUIT NOW AT 40.0 MILLION BOXES

The Florida grapefruit forecast for certified utilization (including 1.5 million boxes of gift fruit and local sales) is 40.0 million boxes. This is a reduction of 2.0 million boxes from the initial October forecast of 42.0 million boxes. Both the white category (including the seedy varieties) and the colored varieties are decreased 1.0 million boxes. White grapefruit is now forecast at 16.0 million boxes and colored at 24.0 million boxes. Both reductions are indicated by changes made in the projected average fruit size at harvest (January survey data). If realized, this forecast amount will be 14 percent less than the 46.7 million boxes recorded last season and the smallest amount since the 35.7 million boxes in the 1989-90 freeze season.

The fruit population (bearing trees X average fruit per tree) is down 19 percent from last season, as indicated by summer survey data. However, the average fruit sizes are large. Even when adjusted downward because of the considerably advanced maturity of the crop, they are still projected to be at near record levels at maturity. During October, an anticipated decline in growth rates occurred and the November survey data showed an abnormally small increase in the average fruit size. Although the average fruit size of both categories

Citrus production, December 1, 2002

forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	2000-01	2001-02	Nov 12, 2002	Dec 10, 2002
--- 1,000 boxes ---				
Grapefruit:				
<b>FLORIDA-All</b>	<b>46,000</b>	<b>46,700</b>	<b>42,000</b>	<b>40,000</b>
<b>White</b> <sup>1/</sup>	<b>18,700</b>	<b>18,900</b>	<b>17,000</b>	<b>16,000</b>
<b>Colored</b>	<sup>2/</sup> <b>27,300</b>	<b>27,800</b>	<b>25,000</b>	<b>24,000</b>
Texas	7,200	5,900	5,600	5,600
Arizona	250	160	100	100
California	6,300	6,000	6,200	6,200
<b>Total Grapefruit</b>	<b>59,750</b>	<b>58,760</b>	<b>53,900</b>	<b>51,900</b>
Lemons:				
California	22,600	19,000	21,000	21,000
Arizona	3,600	2,800	2,800	2,800
<b>Total Lemons</b>	<b>26,200</b>	<b>21,800</b>	<b>23,800</b>	<b>23,800</b>
<b>Limes: Florida</b>	<b>250</b>	<b>150</b>	<sup>3/</sup>	<sup>3/</sup>
<b>Temples: Florida</b>	<b>1,250</b>	<b>1,550</b>	<b>1,400</b>	<b>1,400</b>
<b>Tangelos: Florida</b>	<b>2,100</b>	<b>2,150</b>	<b>2,400</b>	<b>2,400</b>
<b>K-Early: Florida</b>	<b>40</b>	<b>30</b>	<sup>3/</sup>	<sup>3/</sup>
Tangerines:				
<b>FLORIDA-All</b>	<b>5,600</b>	<b>6,600</b>	<b>5,200</b>	<b>5,200</b>
<b>Early</b> <sup>4/</sup>	<b>3,550</b>	<b>4,350</b>	<b>3,100</b>	<b>3,100</b>
<b>Honey</b>	<b>2,050</b>	<b>2,250</b>	<b>2,100</b>	<b>2,100</b>
California <sup>5/</sup>	2,200	2,200	2,300	2,300
Arizona <sup>5/</sup>	650	620	450	450
<b>Total Tangerines</b>	<b>8,450</b>	<b>9,420</b>	<b>7,950</b>	<b>7,950</b>

<sup>1/</sup> Includes seedy. <sup>2/</sup> Excludes two million boxes of economic abandonment.

<sup>3/</sup> No forecast. <sup>4/</sup> 2000-01 through 2001-02 -- Robinson, Fallglo, Sunburst, and Dancy; 2002-03 forecast -- Fallglo and Sunburst only. <sup>5/</sup> Includes tangelos.

remains above the past 10 season mean, the projection now indicates that it will take six more whites and five more colored than projected at the October survey date to make an 85 pound equivalent box. Fruit loss from droppage to harvest is continuing as projected in October.

### Components used in the December forecast

Type	Bearing trees	Fruit per tree	Percent droppage	Fruit per box
	<b>(1,000)</b>			
White Grapefruit <sup>1/</sup>	3,784	398	9	87
Colored Grapefruit	6,352	387	12	91

<sup>1/</sup> Seedless variety only.

## ALL TANGERINES HELD AT 5.2 MILLION BOXES

The all tangerine forecast is continued at 5.2 million boxes, divided into the **early** category (comprised of **Fallglo** and **Sunburst**) at 3.1 million boxes and the late category (**Honey**) at 2.1 million boxes. **Fallglo** harvest is complete and the **Sunburst** harvest is well underway.

Harvest of the **Honey** tangerine crop, projected to be seven percent less than last season, has not started. The average fruit size is slightly above the 10 season mean but much smaller than the record set last season. Fruit loss from droppage through mid-November is about three percentage points below the 10 season average. Pre-harvest loss through mid-January in the past 10 seasons has ranged between 21 and 55 percent, averaging 39 percent.

## TEMPLES AT 1.4 MILLION BOXES

The Temple forecast is unchanged at 1.4 million boxes. This is 11 percent less than the 1.550 million boxes recorded last season. If the amount is realized it would equal the second smallest crop recorded in the freeze damaged season of 1989-90.

Average fruit size continues to be the largest in the 10 season series. Loss from fruit droppage is near the mean, as projected. The almost 28 percent decrease in the fruit population from last season is the reason for the lower crop indication.

## TANGELOS STAY 2.4 MILLION BOXES

The tangelo forecast is continued at 2.4 million boxes. At the December 1 accepted harvest date, the average fruit size is the second largest in the 10 season series and loss from droppage is below the mean. Both of these are close to the levels projected in October.

If the forecast amount is finally recorded, it will be the largest crop in the past three seasons. Fruit size is the major factor in the level of the forecast.

**UNADJUSTED MATURITY TESTS: Average of regular bloom fruit from sample groves, 2001-02 and 2002-03 seasons**

Fruit type (No. groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03	2001-02	2002-03
	Percent		Percent				Pounds		Pounds	
Juice and solids per box are unadjusted and not comparable to plant test results.										
<b>ORANGES:</b>										
Early (85-76)										
Sep 1	1.41	1.34	9.64	9.47	6.99	7.19	43.44	44.76	4.19	4.24
Oct 1	1.00	0.91	9.80	9.90	10.05	11.10	48.59	51.00	4.76	5.04
Nov 1	0.82	0.73	10.51	10.57	13.05	14.74	51.84	52.78	5.45	5.58
Dec 1	NA	0.73	NA	11.37	NA	15.89	NA	49.57	NA	5.63
Mid (48-51)										
Sep 1	1.60	1.43	9.33	9.04	5.94	6.41	42.90	46.06	4.00	4.16
Oct 1	1.18	1.02	9.50	9.59	8.24	9.63	49.79	52.84	4.73	5.07
Nov 1	0.96	0.83	10.44	10.40	11.09	12.84	53.39	54.64	5.57	5.68
Dec 1	NA	0.79	NA	11.27	NA	14.62	NA	53.66	NA	6.05
Late (150-150)										
Sep 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct 1	2.19	2.04	8.87	8.70	4.11	4.34	47.72	48.96	4.23	4.26
Nov 1	1.76	1.64	9.20	9.23	5.31	5.72	52.00	52.37	4.79	4.83
Dec 1	NA	1.42	NA	10.05	NA	7.19	NA	53.19	NA	5.35
<b>GRAPEFRUIT:</b>										
White Seedless (47-42)										
Sep 1	1.67	1.56	9.82	9.67	5.91	6.23	33.86	35.25	3.33	3.41
Oct 1	1.46	1.42	9.73	9.88	6.70	6.99	38.80	38.21	3.78	3.77
Nov 1	1.33	1.27	9.81	10.20	7.43	8.15	42.31	40.30	4.16	4.10
Dec 1	1.26	1.30	9.96	10.45	7.93	8.10	44.48	42.37	4.43	4.42
Colored Seedless (44-36)										
Sep 1	1.65	1.54	10.05	10.16	6.12	6.63	34.62	35.80	3.48	3.64
Oct 1	1.43	1.34	10.08	10.32	7.06	7.78	40.15	39.41	4.05	4.07
Nov 1	1.26	1.20	10.16	10.71	8.10	8.99	43.93	42.25	4.47	4.52
Dec 1	1.21	1.21	10.37	10.85	8.59	9.01	44.85	42.97	4.66	4.66

NOTICE: All samples were run through an FMC 091 machine using mechanical pressure only. This machine utilizes a .040 short strainer and standard 5/8-inch orifice tube. The beam settings are also identical to past tests and no restrictors are used.

Maturity test averages by areas, December 1, 2002

Fruit type	Groves sampled	Acid	Solids (Brix)	Ratio	Unfinished juice per box	Solids per box
	Number	Percent	Percent		Pounds	Pounds
<b>ORANGES:</b>						
Early						
Indian River Dist.	8	0.73	11.81	16.36	49.74	5.89
Other Areas	68	0.73	11.31	15.84	49.55	5.60
Midseason						
Indian River Dist.	12	0.76	11.27	15.03	52.71	5.94
Other Areas	39	0.79	11.27	14.49	53.95	6.08
Late						
Indian River Dist.	28	1.44	10.38	7.29	53.25	5.53
Other Areas	122	1.41	9.97	7.17	53.18	5.30
<b>GRAPEFRUIT:</b>						
White Seedless						
Indian River Dist.	32	1.34	10.65	7.99	41.94	4.46
Other Areas	10	1.18	9.83	8.46	43.76	4.30
Colored Seedless						
Indian River Dist.	30	1.23	10.96	9.02	42.71	4.68
Other Areas	6	1.16	10.29	8.94	44.25	4.55

## FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS

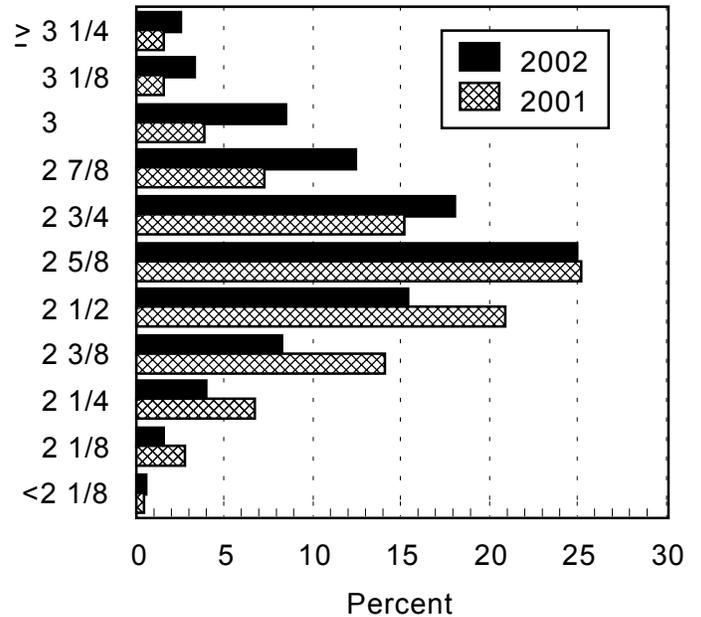
Size frequency distributions are from the November size survey conducted in sample groves during the period of November 1 through 27, 2002. The distributions are by percent from fruit within the size range of each 4/5 bushel container. These frequency distributions relate only to fruit from spring bloom and exclude summer bloom fruit in all seasons.

Florida Citrus: Size frequency distributions from November measurements

Type of fruit and size in 4/5-bushel containers	2000	2001	2002
--- Percent ---			
<b>Early and midseason oranges: (excluding Navels)</b>			
64 and larger	0.5	2.2	3.9
80	5.0	7.9	16.2
100	24.2	29.8	36.1
125	39.1	35.9	29.3
163 and smaller	31.2	24.2	14.5
<b>Navel oranges:</b>			
64 and larger	56.7	58.1	56.2
80	28.9	29.2	29.9
100	12.1	10.0	10.9
125	2.1	2.2	2.5
163 and smaller	0.2	0.5	0.5
<b>White seedless grapefruit:</b>			
32 and larger	9.5	7.3	19.2
36	15.9	14.9	19.8
40	21.6	20.4	24.7
48	21.8	21.8	16.6
56	12.2	13.5	9.5
63 and smaller	19.0	22.1	10.2
<b>Colored seedless grapefruit:</b>			
32 and larger	4.7	3.9	12.4
36	11.0	11.9	16.9
40	20.0	17.5	25.6
48	21.9	22.4	18.7
56	16.5	15.5	11.4
63 and smaller	25.9	28.8	15.0
<b>Sunburst tangerines:</b>			
80 and larger	12.9	9.6	23.3
100	26.9	20.2	35.3
120	32.6	33.3	26.1
176	16.2	15.2	8.9
210 and smaller	11.4	21.7	6.4
<b>Honey tangerines:</b>			
80 and larger	7.4	21.7	12.3
100	35.3	30.7	29.0
120	32.2	25.4	31.6
176	11.8	9.2	12.7
210 and smaller	13.3	13.0	14.4
<b>Temples:</b>			
80 and larger	12.3	8.8	43.0
100	37.4	38.9	39.3
120	38.0	35.8	12.7
156 and smaller	12.3	16.5	5.0
<b>Tangelos:</b>			
80 and larger	22.4	41.5	46.4
100	38.3	31.8	31.4
120	28.2	16.7	17.0
156 and smaller	11.1	10.0	5.2

The charts below describe the relationships of the fruit size measurements with those taken in the previous year. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

**CHART 1: Early and midseason oranges (excluding Navels) size frequency by diameter from November measurements.**



**CHART 2: White seedless grapefruit size frequency by diameter from November measurements.**

